



# ***STIC Search Report***

## ***Biotech-Chem Library***

**STIC Database Tracking Number: 167922**

**TO: David Lukton**  
**Location: REM/3B75/3C18**  
**Art Unit: 1654**  
*Oct 10*, 2005  
**Case Serial Number: 09/963927**

**From: P. Sheppard**  
**Location: Remsen Building**  
**Phone: (571) 272-2529**

**sheppard@uspto.gov**

### **Search Notes**

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SEARCH REQUEST FORM  
(STIC)Requestor's Name: David LuktonExaminer number: 71263Date:

10/5/05

Art Unit: 1654Phone number: 571-272-0952Serial Number:

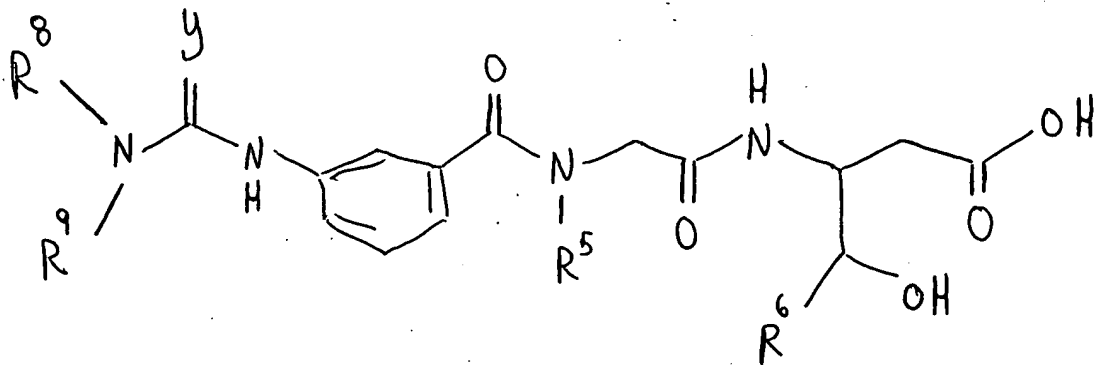
09-963927

Mail Box: 3-C-18Examiner Rm: 3-B-75Results format: paper

\*\*\*\*\*

Title: Hydroxy Acid Integrin AntagonistsApplicants: ROGERS, THOMAS; PENNING, THOMAS D.; JIANG, LAN; DEVADAS, BALEKUDRU; RUMINISKI, PETER; VANCAMP, JENNIFER; YUAN, CHESTEREarliest Priority Date: 9/28/00

\*\*\*\*\*

R<sup>5</sup> = anythingR<sup>6</sup> = anythingR<sup>8</sup> = anythingR<sup>9</sup> = anythingY is an oxygen atom, or else "Y" is >N-R<sup>1</sup>, wherein R<sup>1</sup> can be anything\*\*\*\*\*  
STAFF USE ONLY

## Type of Search

Searcher: \_\_\_\_\_

Searcher Phone #: \_\_\_\_\_

Searcher Location: \_\_\_\_\_

Date Searcher Picked Up: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Searcher Prep &amp; Review Time: \_\_\_\_\_

Online Time: \_\_\_\_\_

\_\_\_\_ NA Sequence (#)

\_\_\_\_ AA Sequence (#)

\_\_\_\_ Structure (#)

\_\_\_\_ Bibliographic

\_\_\_\_ Litigation

\_\_\_\_ Fulltext

\_\_\_\_ Other

## Vendors and cost where applicable

\_\_\_\_ STN      \_\_\_\_ Dialog

\_\_\_\_ Questel/Orbit      \_\_\_\_ Lexis/Nexis

\_\_\_\_ Westlaw      \_\_\_\_ WWW/Internet

\_\_\_\_ In-house sequence systems

\_\_\_\_ Commercial      \_\_\_\_ Oligomer      \_\_\_\_ Score/Length  
\_\_\_\_ Interference      \_\_\_\_ SPDI      \_\_\_\_ Encode/Transl

\_\_\_\_ Other (specify)

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=> d his ful

(FILE 'HOME' ENTERED AT 18:12:03 ON 11 OCT 2005)

FILE 'REGISTRY' ENTERED AT 18:12:11 ON 11 OCT 2005

L1 STR  
L2 3 SEA SSS SAM L1  
L3 78 SEA SSS FUL L1

FILE 'HCAPLUS' ENTERED AT 18:16:05 ON 11 OCT 2005

L4 5 SEA ABB=ON PLU=ON L3  
D STAT QUE  
D IBIB ABS HITSTR L4 1-5

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 10 OCT 2005 HIGHEST RN 864908-12-3

DICTIONARY FILE UPDATES: 10 OCT 2005 HIGHEST RN 864908-12-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE HCAPLUS

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FILE COVERS 1907 - 11 Oct 2005 VOL 143 ISS 16  
FILE LAST UPDATED: 10 Oct 2005 (20051010/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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=>

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 18:16:05 ON 11 OCT 2005  
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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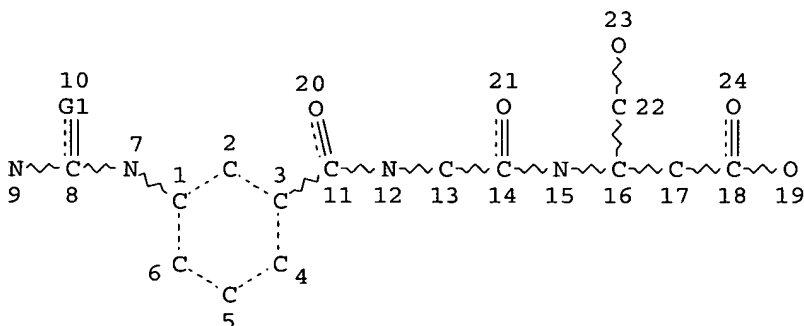
FILE COVERS 1907 - 11 Oct 2005 VOL 143 ISS 16  
FILE LAST UPDATED: 10 Oct 2005 (20051010/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d stat que

L1 STR



• VAR G1=O/N  
• NODE ATTRIBUTES:  
• DEFAULT MLEVEL IS ATOM  
• DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 24

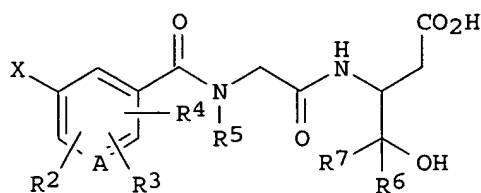
STEREO ATTRIBUTES: NONE

L3 78 SEA FILE=REGISTRY SSS FUL L1  
L4 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

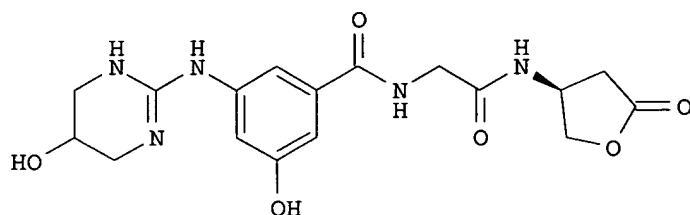
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=> d ibib abs hitstr l4 1-5

L4 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2002:256240 HCAPLUS  
DOCUMENT NUMBER: 136:279118  
TITLE: Preparation and use of amido-hydroxy-carboxylic acid  
integrin antagonists  
INVENTOR(S): Rogers, Thomas; Penning, Thomas D.; Jiang, Lan;  
Devadas, Balekudru; Ruminiski, Peter; Chester, Yuan;  
Vancamp, Jennifer  
PATENT ASSIGNEE(S): Pharmacia Corporation, USA  
SOURCE: PCT Int. Appl., 64 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002026717	A2	20020404	WO 2001-US30189	20010927
WO 2002026717	C1	20021227		
WO 2002026717	A3	20020912		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002072500	A1	20020613	US 2001-963927	20010926
CA 2423464	AA	20020404	CA 2001-2423464	20010927
AU 2001093131	A5	20020408	AU 2001-93131	20010927
EP 1322623	A2	20030702	EP 2001-973568	20010927
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004509950	T2	20040402	JP 2002-531101	20010927
US 2004024062	A1	20040205	US 2003-381825	20030327
PRIORITY APPLN. INFO.:			US 2000-235616P	P 20000927
			US 2000-241656P	P 20001010
			WO 2001-US30189	W 20010927
OTHER SOURCE(S): MARPAT 136:279118				
GI				



I



II

AB Title compds. I [X = NHC:YNR8R9, NHC:NR1NR8R9, etc.; Y = NR1, O, S; A = N, C; R1 = H, alkyl, aryl, hydroxy, alkoxy, cyano, nitro, amino, alkenyl, alkynyl, amido, etc. or R1 taken together with R8 forms a 4-12 membered heterocycle; R8 (when not taken together with R1), R9 = H, alk(en/yn)yl, aralkyl, amino, alkylamino, hydroxy, alkoxy, arylamino, amido, alkylcarbonyl, arylcarbonyl, alkoxycarbonyl, aryloxy, aryloxycarbonyl, haloalkylcarbonyl, haloalkoxycarbonyl, alkylthiocarbonyl, arylthiocarbonyl, acyloxymethoxycarbonyl, etc. or NR8 and R9 taken together form a 4-12 membered heterocycle; R2-4 = H, alkyl, hydroxy, alkoxy, aryloxy, halogen, haloalkyl, haloalkoxy, nitro, amino, alkylamino, acylamino, dialkylamino, cyano, alkylthio, etc.; R5-7 = H, alk(en/yn)yl, aryl, carboxy derivs., haloalkyl, cycloalkyl, monocyclic heterocycles, monocyclic heterocycles optionally substituted with alkyl, halogen, haloalkyl, cyano, hydroxy, aryl, fused aryl, nitro, alkoxy, aryloxy, alkylsulfonyl, arylsulfonyl, sulfonamide, thio, alkylthio, carboxy derivs., amino, amido, etc.] were prepared For instance, (4S)-4-aminodihydro-2(3H)furanone hydrochloride (preparation given) was reacted with Boc-Gly-OSu (DMF, NMM, 0°C, 18 h) and the product deprotected with 4N HCl. The intermediate amine was condensed with the corresponding carboxylic acid (prior art, DMF, CH2Cl2, DCC, NMM, 18 h) to give intermediate lactone II isolated as the TFA salt. The desired hydroxy acid was obtained by hydrolysis and isolation at a final pH of approx. 8. Example compds. had IC50 = 0.1 nM - 100 nM for the  $\alpha v\beta 3$  integrin and IC50 < 50  $\mu$ M for the  $\alpha v\beta 5$  integrin. I are useful for the treatment of tumor metastasis, solid tumor growth, macular degeneration, etc.

IT 406682-29-9P 406682-30-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

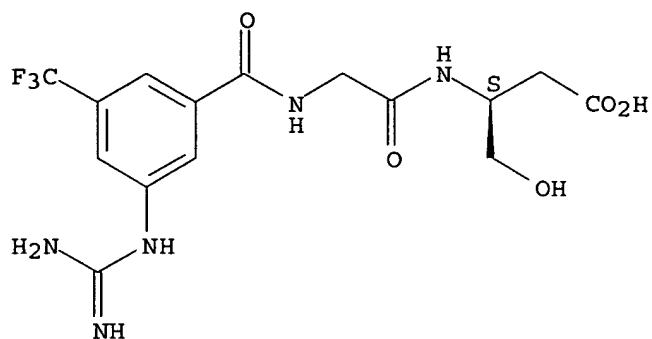
(drug; preparation and use of amido-hydroxy-carboxylic acid integrin antagonists)

RN 406682-29-9 HCAPLUS

CN Butanoic acid, 3-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-hydroxy-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





RN 406682-30-2 HCAPLUS

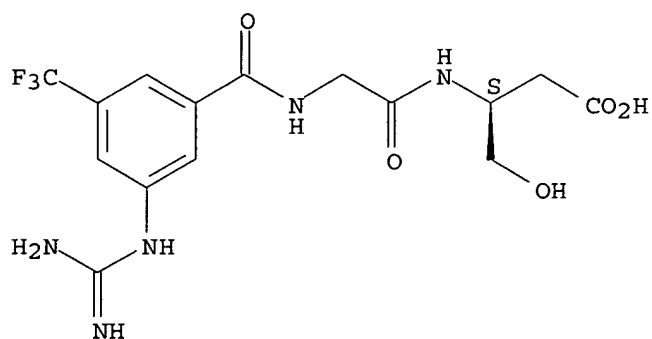
CN Butanoic acid, 3-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-hydroxy-, (3S)-, trifluoroacetate (2:3) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 406682-29-9

CMF C15 H18 F3 N5 O5

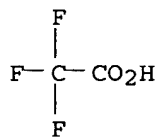
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



L4 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:44410 HCAPLUS

DOCUMENT NUMBER: 136:259122

TITLE: Comparative Study of the Active Site Caging of Serine  
Proteases: Thrombin and Factor Xa

AUTHOR(S): Thuring, Jan Willem; Li, Hui; Porter, Ned A.  
CORPORATE SOURCE: Department of Chemistry, Duke University, Durham, NC,  
27708, USA  
SOURCE: Biochemistry (2002), 41(6), 2002-2013  
CODEN: BICHAW; ISSN: 0006-2960  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 136:259122

AB Bovine thrombin and human factor Xa were acylated at their active site selectively with inhibitors derived from the parent compound 4-guanidinophenyl (E)-4-diethylamino-2-hydroxy- $\alpha$ -methylcinnamate hydrochloride, 1b. Peptidyl side chains were attached to the phenol ring via amide connection, which served as a recognition motif in inhibiting different serine proteases. Upon irradiation with 366 nm light, the trans-cinnamate attached to the active-site serine isomerizes to the cis isomer which then rapidly lactonizes to release the free enzyme. The peptidyl side chain sequences specific for each serine protease were revealed via constructing and screening a library of homologous compds. This methodol. may be applied to other proteases. One application based on enzyme-specific, photoactivatable inhibitors is to isolate a designated active protease from a mixture of several proteases. Thus, a cinnamate inhibitor with a biotin moiety, 1d, was synthesized. A solution of enzyme-specific, biotinylated inhibitor was added into a mixture of proteases containing a target enzyme. The target enzyme was acylated at the active site and subsequently bore a biotin tail. An avidin column was used to sep. the biotinylated enzyme from the unmodified ones, by a strong binding between biotin and avidin. After a brief irradiation on the avidin column, the retained enzymes were released from the biotin tag and eluted off the column. To demonstrate the idea, thrombin and factor Xa have been separated from each other by this strategy.

IT 405074-68-2 405074-76-2 405074-88-6  
405074-98-8 405075-06-1 405075-14-1  
405075-22-1 405075-30-1 405075-38-9  
405075-46-9 405075-54-9 405075-61-8  
405075-69-6

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)

(library of photoactivatable peptide-substituted cinnamate inhibitors permits comparative study of active site caging in thrombin and factor Xa)

RN 405074-68-2 HCAPLUS

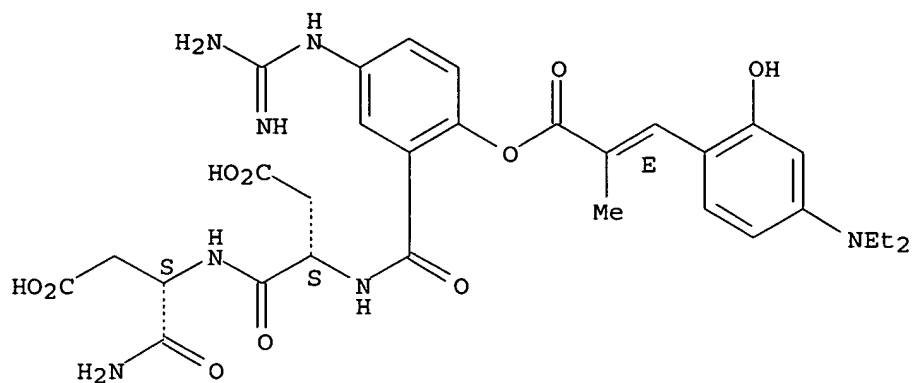
CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L- $\alpha$ -aspartyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247106-31-6

CMF C30 H37 N7 O10

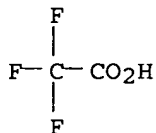
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 405074-76-2 HCAPLUS

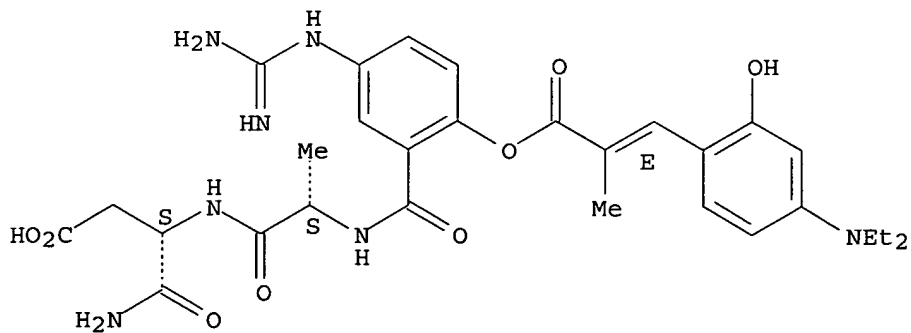
CN L-α-Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[{(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-alanyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247106-23-6

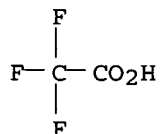
CMF C29 H37 N7 O8

Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1  
CMF C2 H F3 O2

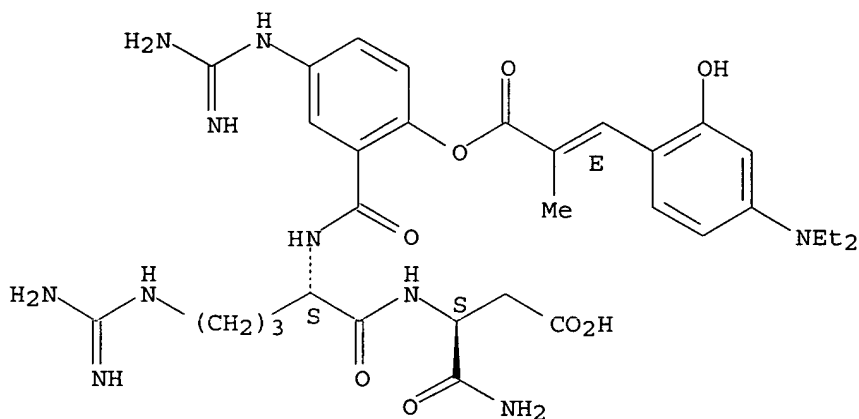


RN 405074-88-6 HCAPLUS  
CN L- $\alpha$ -Asparagine, N2-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-arginyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

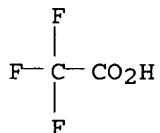
CRN 247107-19-3  
CMF C32 H44 N10 O8

Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1  
CMF C2 H F3 O2



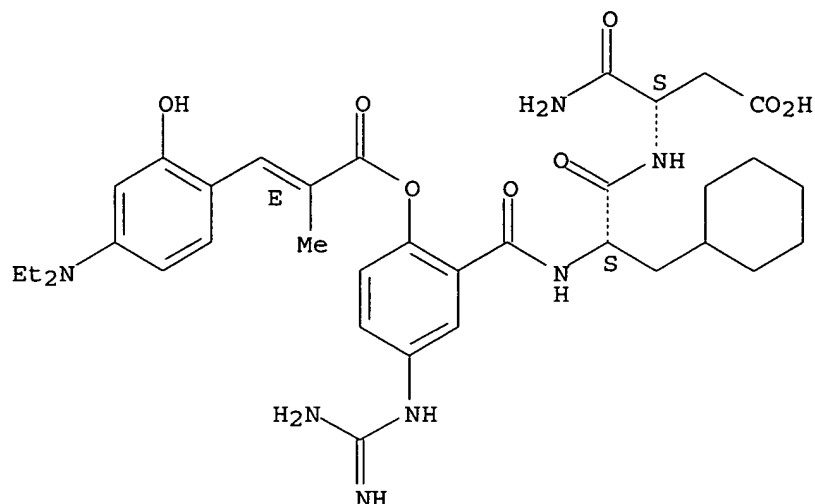
RN 405074-98-8 HCAPLUS  
CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-3-cyclohexyl-L-alanyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247107-27-3

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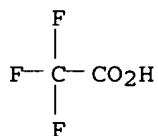
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 405075-06-1 HCAPLUS

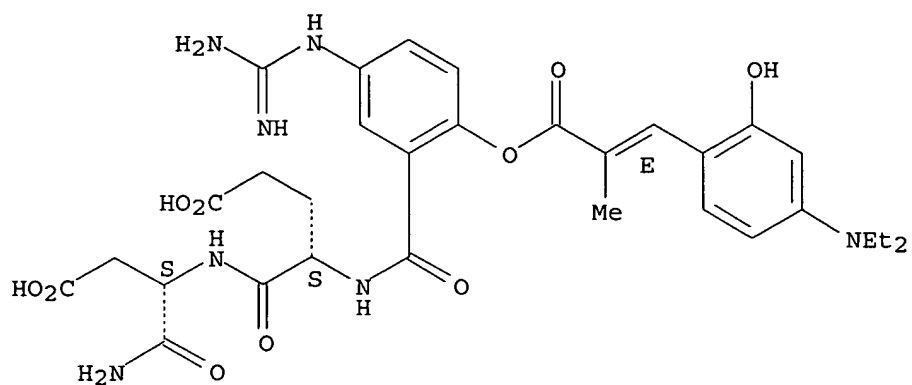
CN L-α-Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-α-glutamyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247106-39-4

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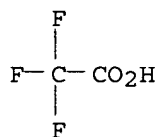
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 405075-14-1 HCAPLUS

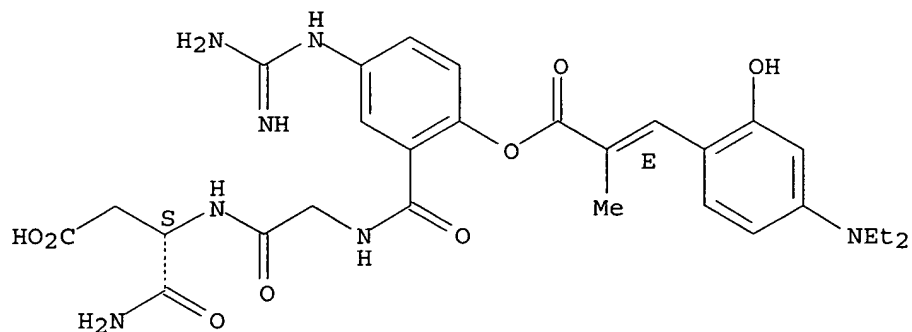
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CM 1

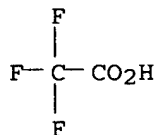
CRN 247106-47-4

CMF C28 H35 N7 O8

Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

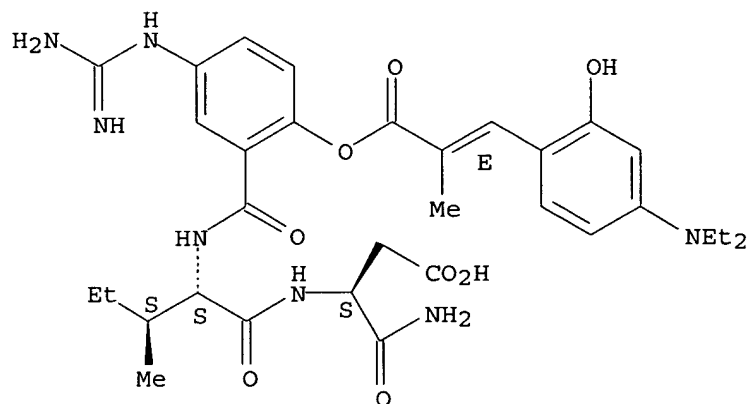
CRN 76-05-1  
CMF C2 H F3 O2

RN 405075-22-1 HCAPLUS  
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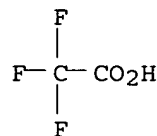
CM 1

CRN 247106-55-4  
CMF C32 H43 N7 O8

Absolute stereochemistry.  
 Double bond geometry as shown.



CM 2

CRN 76-05-1  
CMF C2 H F3 O2

RN 405075-30-1 HCAPLUS  
 CN L- $\alpha$ -Asparagine, N2-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-

Lukton 09\_963927

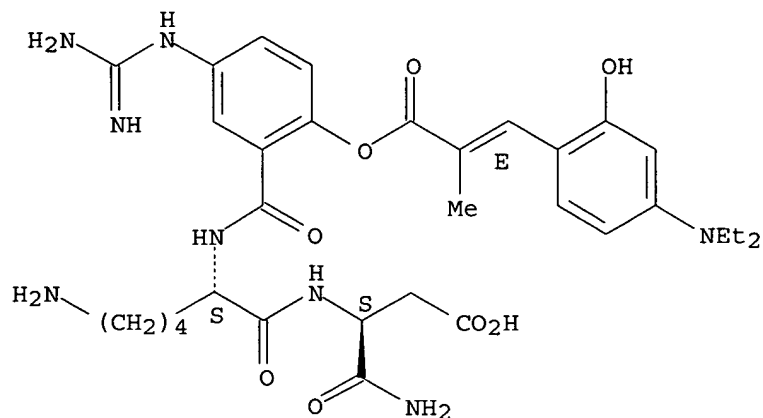
lysyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247106-63-4

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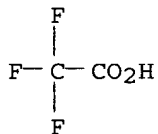
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 405075-38-9 HCAPLUS

CN L- $\alpha$ -Asparagine, N2-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-ornithyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

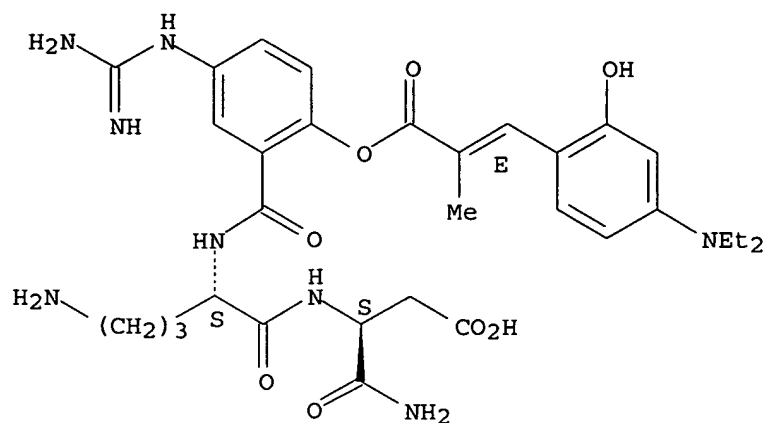
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CRN 247106-71-4

CMF C31 H42 N8 O8

Absolute stereochemistry.  
Double bond geometry as shown.

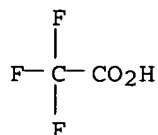




CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 405075-46-9 HCAPLUS

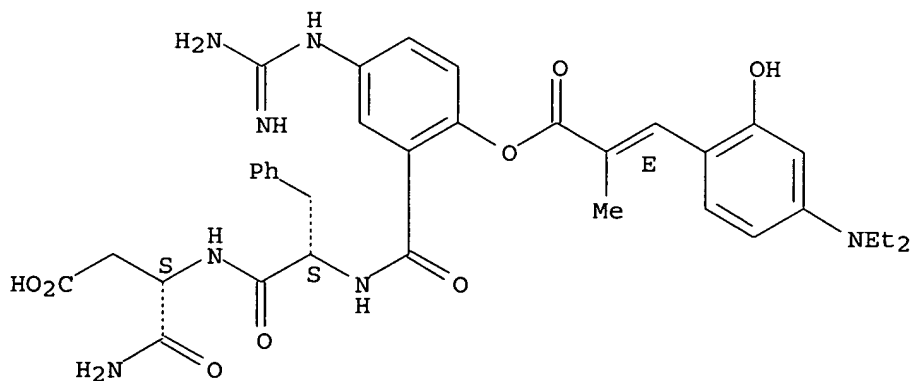
CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-phenylalanyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247106-79-2

CMF C35 H41 N7 O8

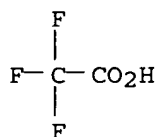
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 405075-54-9 HCAPLUS

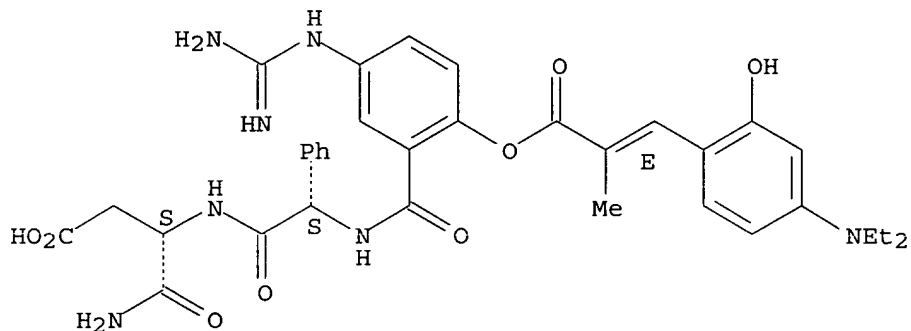
CN L- $\alpha$ -Asparagine, (2S)-N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-2-phenylglycyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247106-87-2

CMF C34 H39 N7 O8

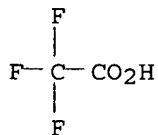
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 405075-61-8 HCAPLUS

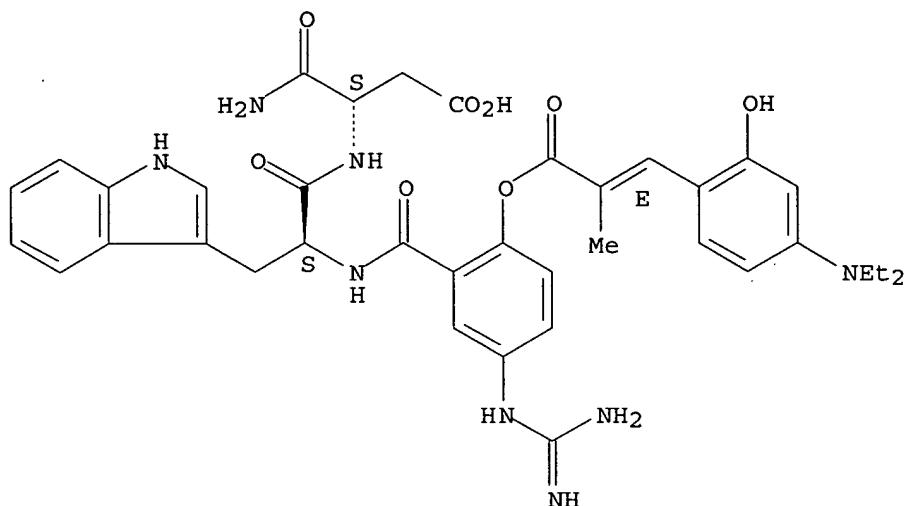
CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-tryptophyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247107-03-5

CMF C37 H42 N8 O8

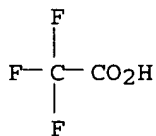
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 405075-69-6 HCAPLUS

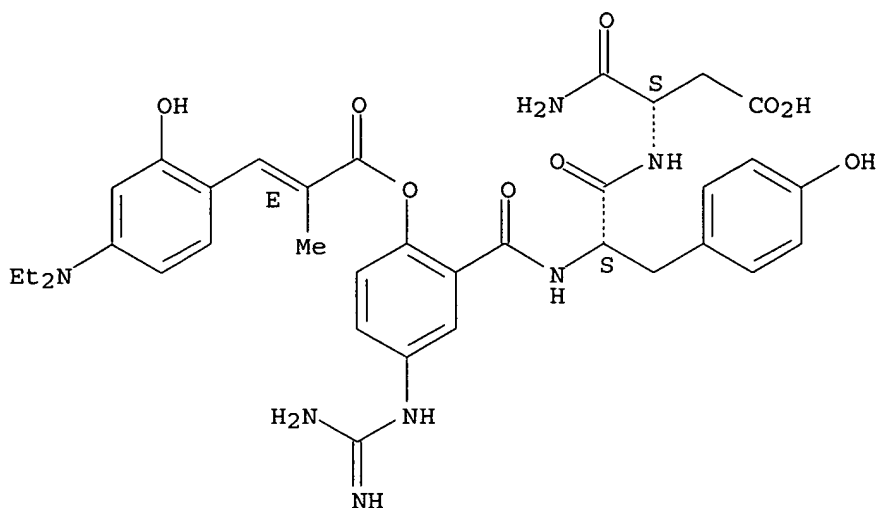
CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-tyrosyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 247107-11-5

CMF C35 H41 N7 O9

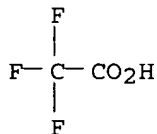
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:659421 HCAPLUS

DOCUMENT NUMBER: 131:295583

TITLE: Dual avb3 and metastasis-associated receptor ligands

INVENTOR(S): Tjoeng, Foe S.; Fok, Kam F.

PATENT ASSIGNEE(S): G.D. Searle and Co., USA

SOURCE: PCT Int. Appl., 108 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9951638	A1	19991014	WO 1999-US4295	19990407
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2325342 AA 19991014 CA 1999-2325342 19990407  
 AU 9935453 A1 19991025 AU 1999-35453 19990407  
 EP 1070085 A1 20010124 EP 1999-917301 19990407

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

JP 2002510709 T2 20020409 JP 2000-542359 19990407

PRIORITY APPLN. INFO.: US 1998-81074P P 19980408  
 WO 1999-US4295 W 19990407

OTHER SOURCE(S): MARPAT 131:295583

AB The present invention relates to pharmaceutical compds. which are dual  
 avb3 receptor/metastasis-associated receptor ligands. The use of these dual  
 ligands alone or in conjunction with other agents in pharmaceutical  
 compns., and in methods for treating conditions mediated by avb3 for the  
 treatment of cancer and other angiogenic diseases, such as diabetic  
 retinopathy, arthritis, hemangiomas, and psoriasis, are also disclosed.

IT 246135-47-7P 246135-52-4P 246135-53-5P

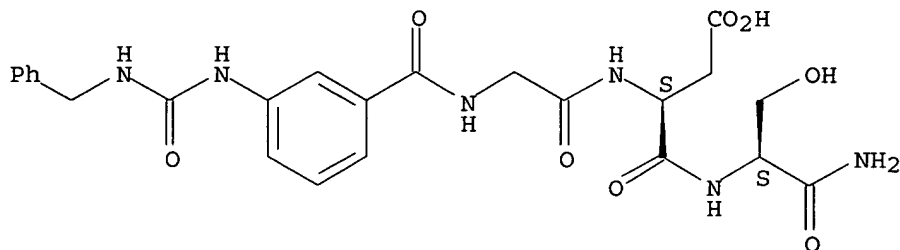
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT  
 (Reactant or reagent); USES (Uses)

(dual Avb3 and metastasis-associated receptor ligands in relation to  
 angiogenesis inhibitor activity and treatment of cancer and other  
 diseases)

RN 246135-47-7 HCAPLUS

CN L-Serinamide, N-[3-[[[(phenylmethyl)amino]carbonyl]amino]benzoyl]glycyl-L-  
 $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

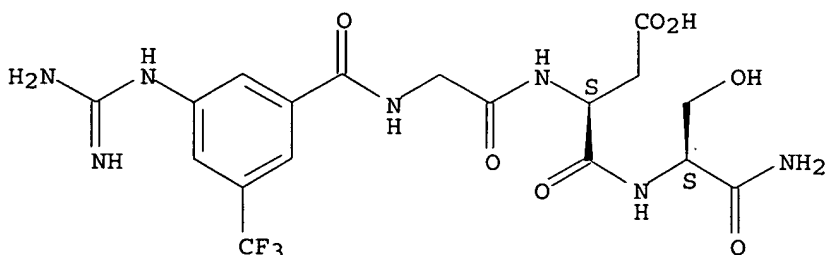
Absolute stereochemistry.



RN 246135-52-4 HCAPLUS

CN L-Serinamide, N-[3-[(aminoiminomethyl)amino]-5-(  
 (trifluoromethyl)benzoyl]glycyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

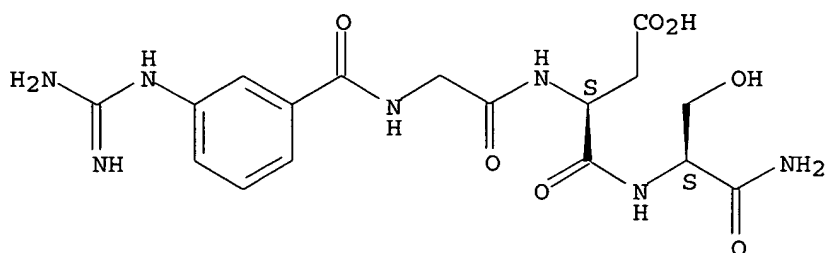
Absolute stereochemistry.



RN 246135-53-5 HCAPLUS

CN L-Serinamide, N-[3-[(aminoiminomethyl)amino]benzoyl]glycyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



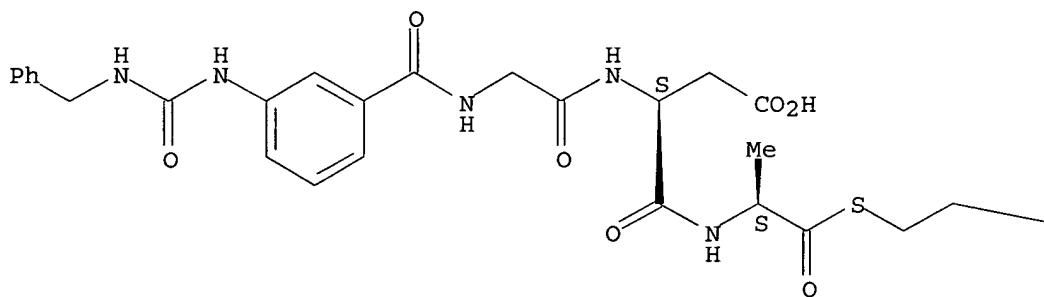
IT 246135-81-9DP, conjugates with interferon  $\alpha$   
 246135-82-0DP, conjugates with interferon  $\alpha$   
 246135-83-1DP, conjugates with interferon  $\alpha$   
 246135-84-2DP, conjugates with interferon  $\alpha$   
 246135-85-3DP, conjugates with interferon  $\alpha$   
 246135-86-4DP, conjugates with interferon  $\alpha$   
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (dual Avb3 and metastasis-associated receptor ligands in relation to angiogenesis inhibitor activity and treatment of cancer and other diseases)

RN 246135-81-9 HCAPLUS

CN L-Alanine, N-[3-[[[(phenylmethyl)amino]carbonyl]amino]benzoyl]glycyl-L- $\alpha$ -aspartylthio-, 3-S-(2-carboxyethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

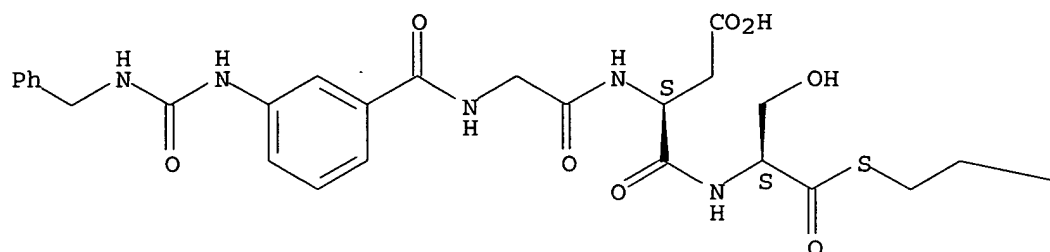
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RN 246135-82-0 HCAPLUS

CN L-Serine, N-[3-[[[(phenylmethyl)amino]carbonyl]amino]benzoyl]glycyl-L-  
 $\alpha$ -aspartylthio-, 3-S-(2-carboxyethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



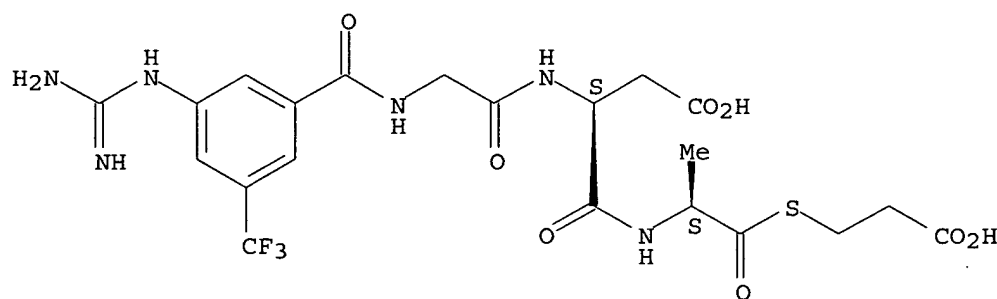
PAGE 1-B

—CO<sub>2</sub>H

RN 246135-83-1 HCAPLUS

CN L-Alanine, N-[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]glycyl-  
 1-L- $\alpha$ -aspartylthio-, 3-S-(2-carboxyethyl) ester (9CI) (CA INDEX NAME)

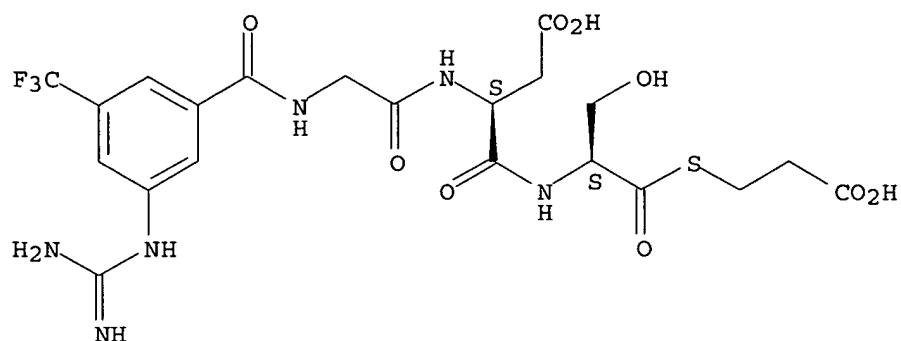
Absolute stereochemistry.



RN 246135-84-2 HCAPLUS

CN L-Serine, N-[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]glycyl-  
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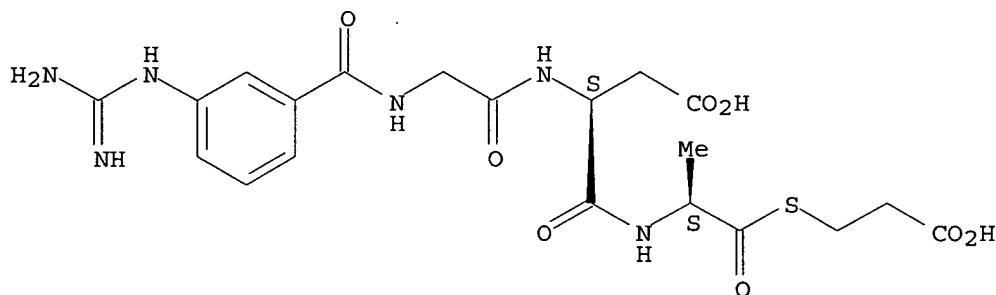
Absolute stereochemistry.



RN 246135-85-3 HCAPLUS

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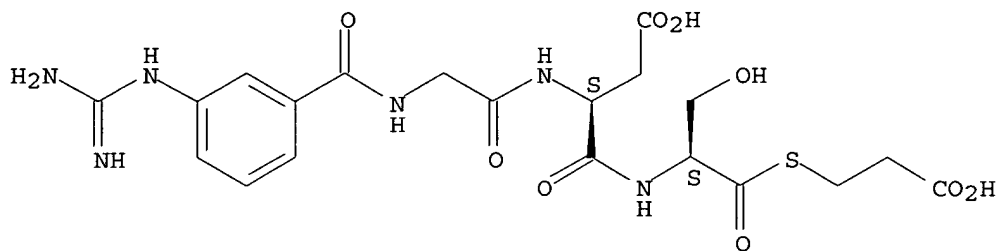
Absolute stereochemistry.



RN 246135-86-4 HCAPLUS

CN L-Serine, N-[3-[(aminoiminomethyl)amino]benzoyl]glycyl-L- $\alpha$ -aspartylthio-, 3-S-(2-carboxyethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:484855 HCAPLUS

DOCUMENT NUMBER: 131:296952

TITLE: Selective Inhibition, Separation, and Purification of Serine Proteases: A Strategy Based on a Photoremovable Inhibitor



AUTHOR(S): Porter, Ned. A.; Thuring, Jan Willem; Li, Hui  
 CORPORATE SOURCE: Department of Chemistry, Duke University, Durham, NC, 27708, USA  
 SOURCE: Journal of the American Chemical Society (1999), 121(33), 7716-7717  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 131:296952

AB Controlling biol. activity with light has become an important strategy for the study of processes as diverse as the activity of neurotransmitters and the coagulation of blood. In the past decade our own efforts have involved the successful use of a strategy to modify the catalytic residue of serine proteases with a photolabile moiety, effectively modifying the enzyme with a photoremovable cage. Caged enzymes generated from proteases of the coagulation cascade can be used to initiate plasma coagulation in vitro and in vivo. The potential for therapeutic and diagnostic applications of such strategies has, however, been largely untapped as has its utility in approaching more general chemical and biochem. problems. We report here a strategy that permits the selective inhibition, separation, and reactivation of two of the coagulation enzymes, thrombin and factor Xa. These studies demonstrate that specific proteases in a mixture of enzymes can be targeted, isolated, and regenerated in their fully active form by means of generating caged enzymes selectively.

IT 247106-23-6P 247106-31-6P 247106-39-4P  
 247106-47-4P 247106-55-4P 247106-63-4P  
 247106-71-4P 247106-79-2P 247106-87-2P  
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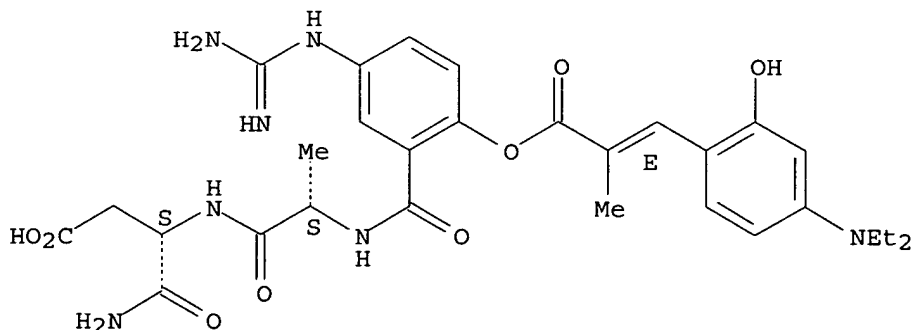
RL: BPR (Biological process); BSU (Biological study, unclassified); NUJ (Other use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(selective inhibition, separation, and purification of serine proteases using a strategy based on a photoremovable inhibitor)

RN 247106-23-6 HCAPLUS

CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-alanyl- (9CI) (CA INDEX NAME)

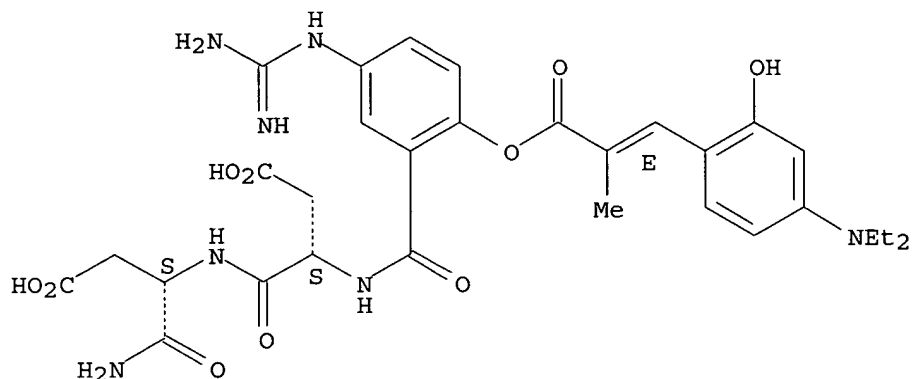
Absolute stereochemistry.  
 Double bond geometry as shown.



RN 247106-31-6 HCAPLUS

CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

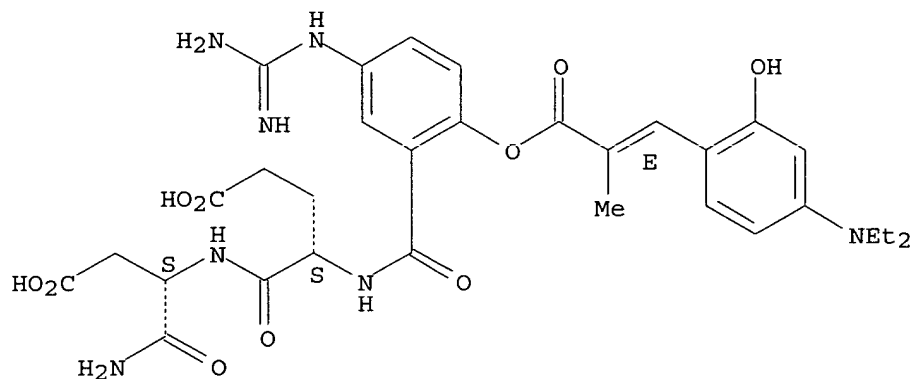
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247106-39-4 HCAPLUS

CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L- $\alpha$ -glutamyl- (9CI) (CA INDEX NAME)

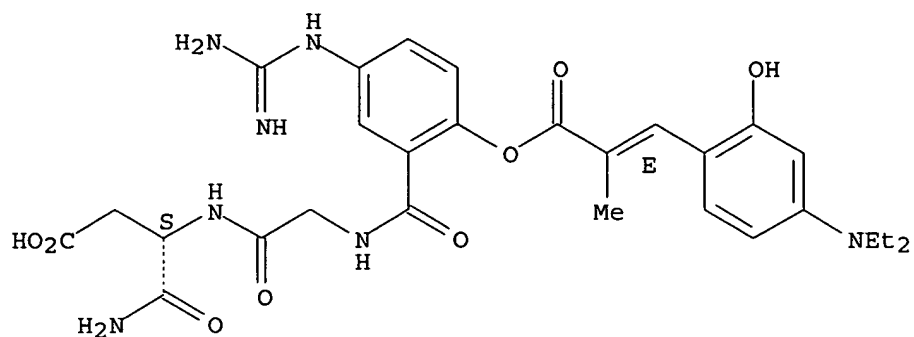
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247106-47-4 HCAPLUS

CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]glycyl- (9CI) (CA INDEX NAME)

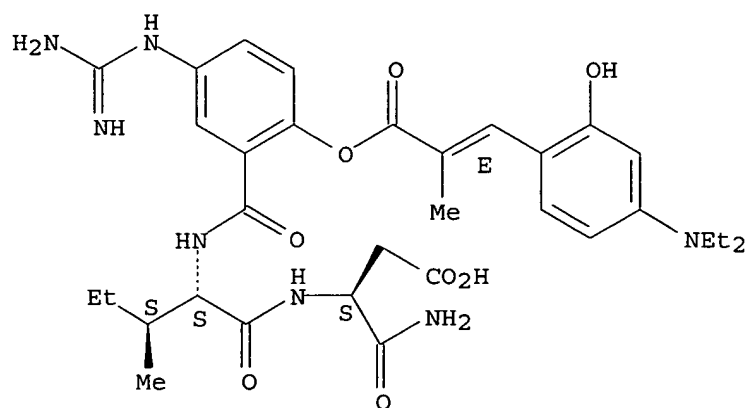
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247106-55-4 HCAPLUS

CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-isoleucyl- (9CI) (CA INDEX NAME)

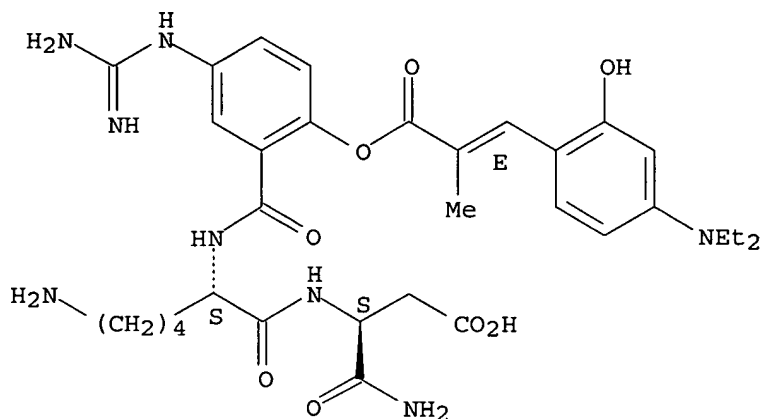
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247106-63-4 HCAPLUS

CN L- $\alpha$ -Asparagine, N2-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-lysyl- (9CI) (CA INDEX NAME)

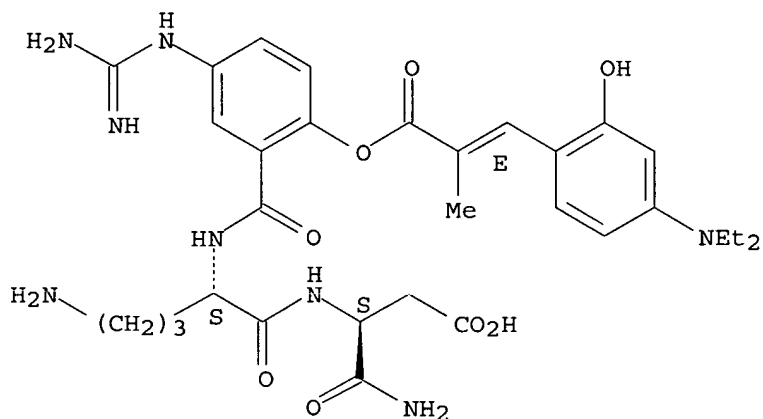
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247106-71-4 HCAPLUS

CN L-α-Asparagine, N2-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-ornithyl- (9CI) (CA INDEX NAME)

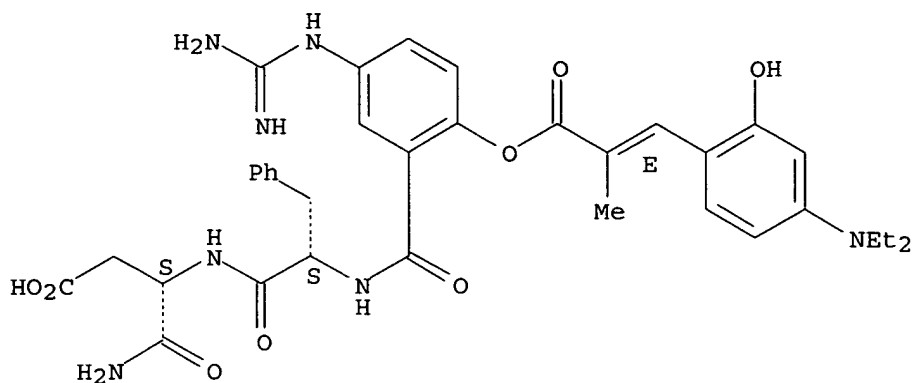
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247106-79-2 HCAPLUS

CN L-α-Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-phenylalanyl- (9CI) (CA INDEX NAME)

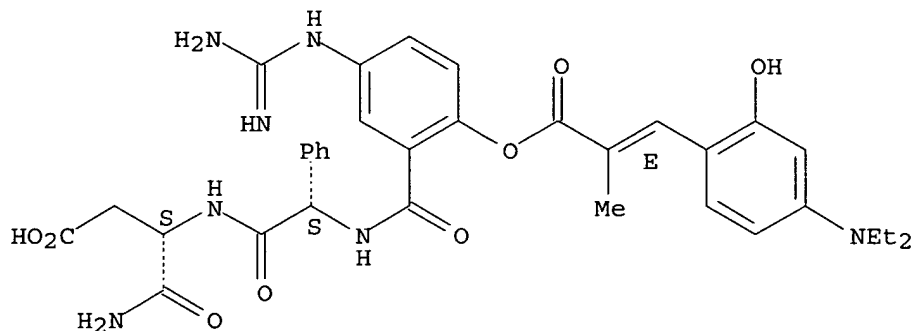
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247106-87-2 HCAPLUS

CN L-α-Asparagine, (2S)-N-[5-[(aminoiminomethyl)amino]-2-[[2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-2-phenylglycyl- (9CI) (CA INDEX NAME)

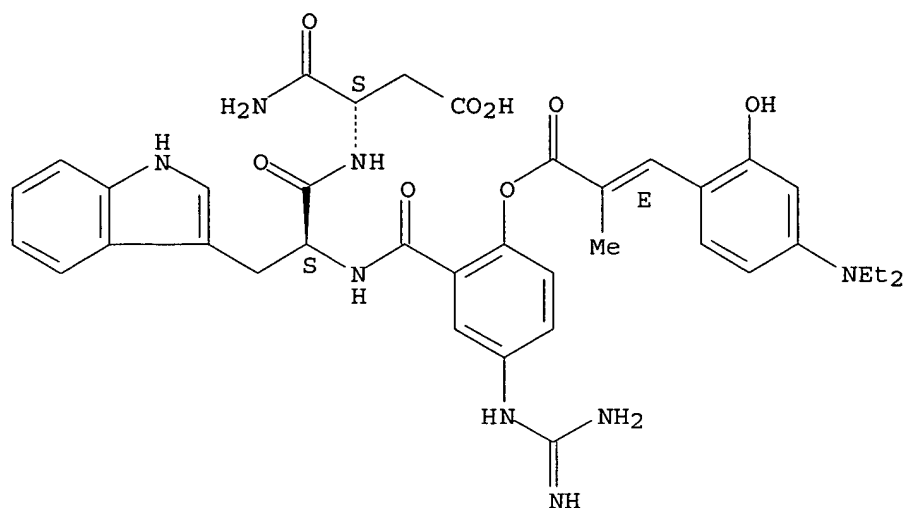
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247107-03-5 HCAPLUS

CN L-α-Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-tryptophyl- (9CI) (CA INDEX NAME)

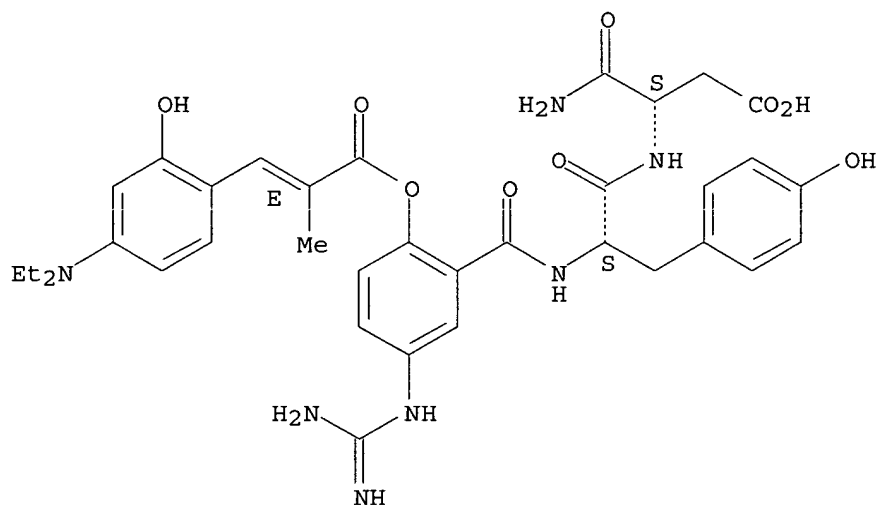
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247107-11-5 HCAPLUS

CN L- $\alpha$ -Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-tyrosyl- (9CI) (CA INDEX NAME)

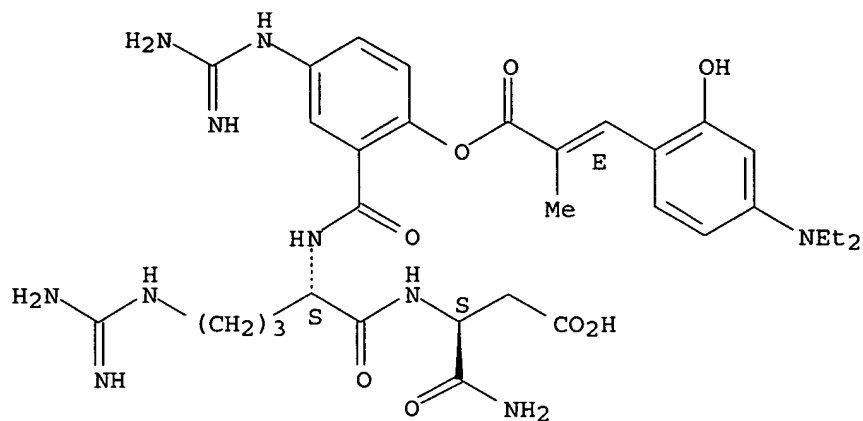
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247107-19-3 HCAPLUS

CN L- $\alpha$ -Asparagine, N2-[5-[(aminoiminomethyl)amino]-2-[[ (2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-L-arginyl- (9CI) (CA INDEX NAME)

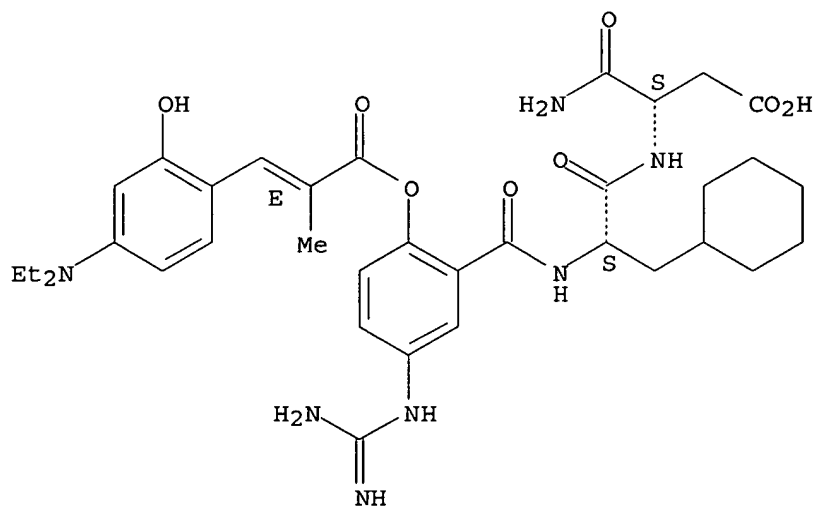
Absolute stereochemistry.  
Double bond geometry as shown.



RN 247107-27-3 HCAPLUS

CN L-α-Asparagine, N-[5-[(aminoiminomethyl)amino]-2-[[[(2E)-3-[4-(diethylamino)-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]benzoyl]-3-cyclohexyl]-L-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:290093 HCAPLUS

DOCUMENT NUMBER: 126:264011

TITLE: Preparation of meta-guanidine, urea, thiourea or azacyclic amino benzoic acid derivatives as integrin antagonists

INVENTOR(S): Ruminski, Peter Gerrard; Clare, Michael; Collins, Paul Waddell; Desai, Bipinchandra Nanubhai; Lindmark, Richard John; Rico, Joseph Gerace; Rogers, Thomas Edward; Russell, Mark Andrew; et al.

PATENT ASSIGNEE(S): G.D. Searle and Co., USA; Ruminski, Peter Gerrard;

## SOURCE:

Clare, Michael; Collins, Paul Waddell; Desai,  
Bipinchandra Nanubhai; Lindmark, Richard, John  
PCT Int. Appl., 930 pp.

CODEN: PIXXD2

## DOCUMENT TYPE:

Patent

## LANGUAGE:

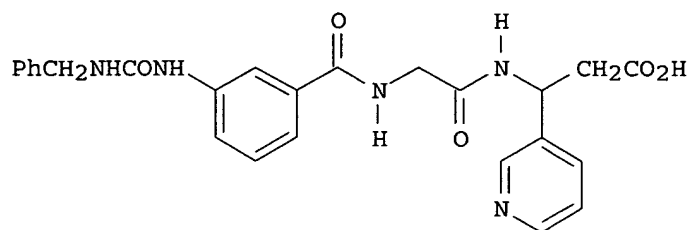
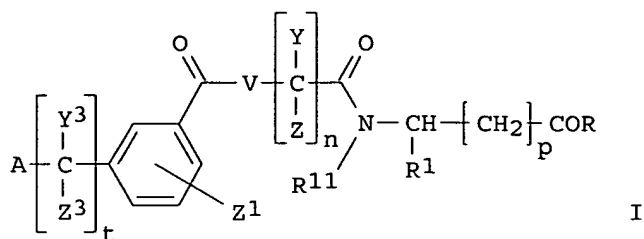
English

FAMILY ACC. NUM. COUNT: 3

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9708145	A1	19970306	WO 1996-US13500	19960827
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM				
CA 2230209	AA	19970306	CA 1996-2230209	19960827
AU 9671039	A1	19970319	AU 1996-71039	19960827
AU 702487	B2	19990225		
EP 850221	A1	19980701	EP 1996-932142	19960827
EP 850221	B1	20010718		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1201454	A	19981209	CN 1996-197911	19960827
CN 1085980	B	20020605		
BR 9610422	A	19990713	BR 1996-10422	19960827
JP 11510814	T2	19990921	JP 1996-510397	19960827
IL 123164	A1	20010319	IL 1996-123164	19960827
AT 203234	E	20010815	AT 1996-932142	19960827
PT 850221	T	20011130	PT 1996-932142	19960827
ES 2161373	T3	20011201	ES 1996-932142	19960827
RU 2196769	C2	20030120	RU 1998-105408	19960827
RO 118290	B1	20030430	RO 2001-1069	19960827
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PL 186370	B1	20031231	PL 1996-325312	19960827
CZ 293323	B6	20040414	CZ 1998-341	19960827
ZA 9607379	A	19980330	ZA 1996-7379	19960830
NO 9800817	A	19980424	NO 1998-817	19980226
NO 311671	B1	20020102		
HK 1021532	A1	20020208	HK 1998-114666	19981228
GR 3036751	T3	20011231	GR 2001-401608	20010928
PRIORITY APPLN. INFO.:			US 1995-3277P	P 19950830
			WO 1996-US13500	W 19960827
OTHER SOURCE(S):	MARPAT 126:264011			
GI				





AB The title compds. I [A = (un)substituted ureido, guanidino, etc. (generic structures given); Z1 = H, alkyl, OH, alkoxy, halo, (di)(alkyl)amino, aryl, etc.; V = NR6; R6 = H, alkyl, etc.; or YR6 forms a 4- to 12-membered mono-N-containing ring; Y, Y3, Z, Z3 = H, alkyl, aryl, cycloalkyl; or YZ or Y3Z3 form cycloalkyl; n = 1-3; t = 0-2; p = 0-3; R = XR3; X = O, S, NH, etc.; R3 = H, alkyl, etc.; R1 = H, alkyl, alkenyl, etc.; R11 = H, alkyl, aralkyl, etc.] are prepared. For example, m-nitrohippuric acid was subjected to a sequence of (1) amidation with Et 3-amino-3-(3-pyridyl)propanoate-2HCl; (2) hydrogenation of the nitro group; (3) reaction of the formed amine with benzyl isocyanate; and (4) alkaline saponification of the ester, to give

title compound II, isolated as the CF<sub>3</sub>CO<sub>2</sub>H or HCl salt. In an in vitro assay for antagonism of human vitronectin receptor (αVβ3), the title compound II.HCl bound with an IC<sub>50</sub> of 0.86 nM.

IT 188805-63-2P 188805-80-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of meta-guanidino, -ureido, -thioureido, or -azacyclic-amino benzoic acid derivs. as integrin antagonists)

RN 188805-63-2 HCAPLUS

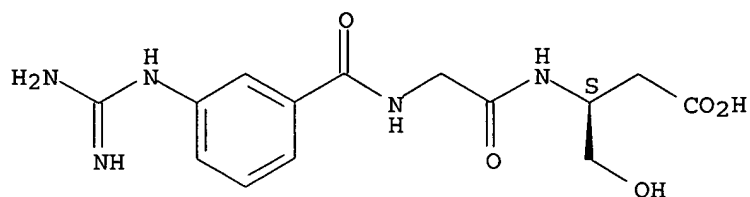
CN Butanoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-hydroxy-, (S)-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 188805-08-5

CMF C14 H19 N5 O5

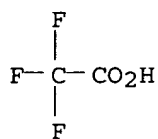
Absolute stereochemistry.



CM 2

CRN 76-05-1

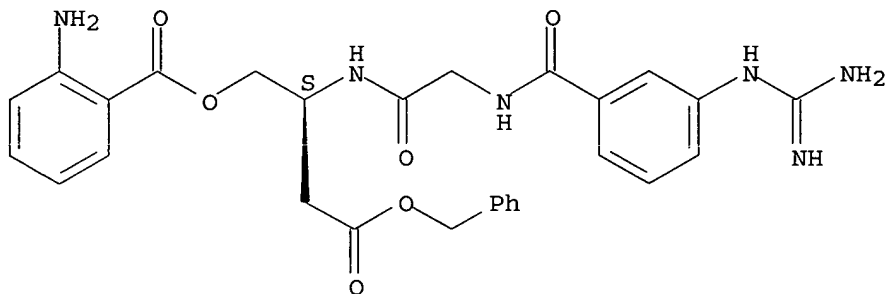
CMF C2 H F3 O2



RN 188805-80-3 HCAPLUS

CN Butanoic acid, 4-[(2-aminobenzoyl)oxy]-3-[[[3-  
[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-, phenylmethyl ester,  
(S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 188805-08-5P 188805-12-1P 188805-13-2P  
188805-17-6P 188805-18-7P 188811-53-2P  
188811-54-3P 188811-55-4P 188811-56-5P  
188811-57-6P 188811-58-7P 188811-59-8P  
188811-60-1P 188811-61-2P 188811-62-3P  
188811-63-4P 188811-64-5P 188811-66-7P  
188811-67-8P 188811-68-9P 188811-69-0P  
188811-70-3P 188811-85-0P 188811-86-1P  
188811-87-2P 188811-88-3P 188811-89-4P  
188811-90-7P 188811-91-8P 188811-92-9P  
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188811-99-6P 188812-00-2P 188812-01-3P

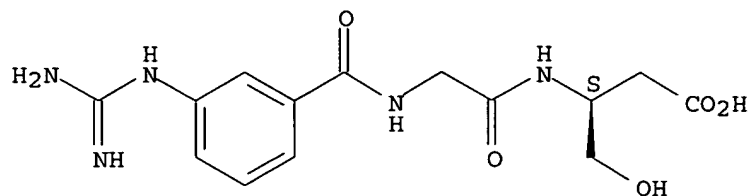
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of meta-guanidino, -ureido, -thioureido, or -azacyclic-amino benzoic acid derivs. as integrin antagonists)

RN 188805-08-5 HCAPLUS

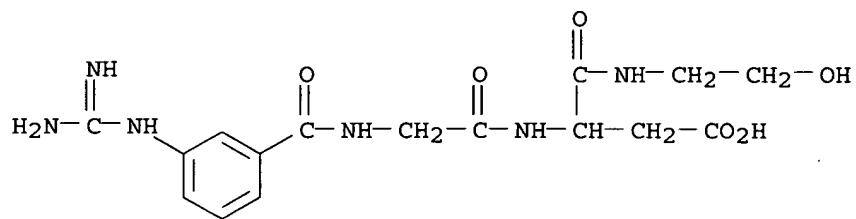
CN Butanoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-hydroxy-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 188805-12-1 HCAPLUS

CN  $\alpha$ -Asparagine, N-[3-[(aminoiminomethyl)amino]benzoyl]glycyl-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



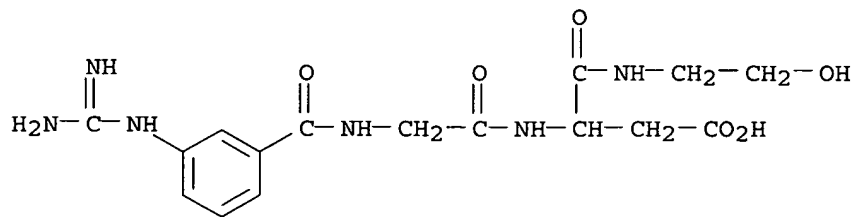
RN 188805-13-2 HCAPLUS

CN  $\alpha$ -Asparagine, N-[3-[(aminoiminomethyl)amino]benzoyl]glycyl-N-(2-hydroxyethyl)-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 188805-12-1

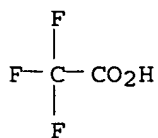
CMF C16 H22 N6 O6



CM 2

CRN 76-05-1

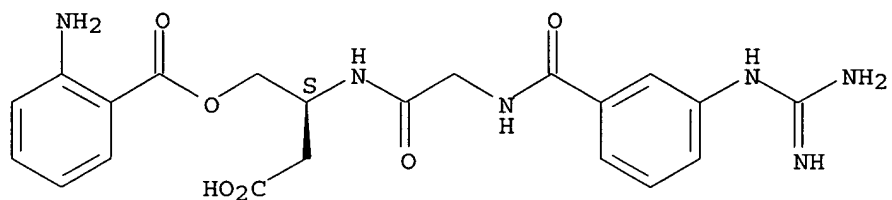
CMF C2 H F3 O2



RN 188805-17-6 HCAPLUS

CN Butanoic acid, 4-[(2-aminobenzoyl)oxy]-3-[[[3-  
[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-, (S)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



RN 188805-18-7 HCAPLUS

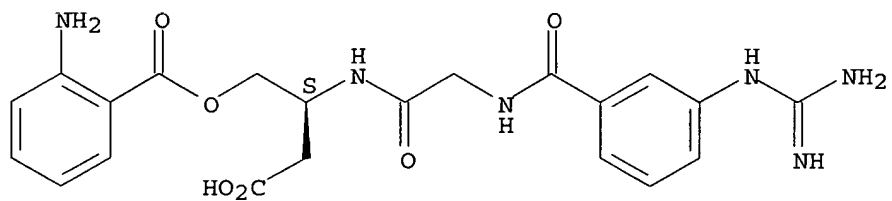
CN Butanoic acid, 4-[(2-aminobenzoyl)oxy]-3-[[[3-  
[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-, (S)-,  
bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 188805-17-6

CMF C21 H24 N6 O6

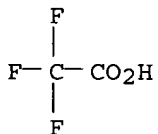
Absolute stereochemistry.



CM 2

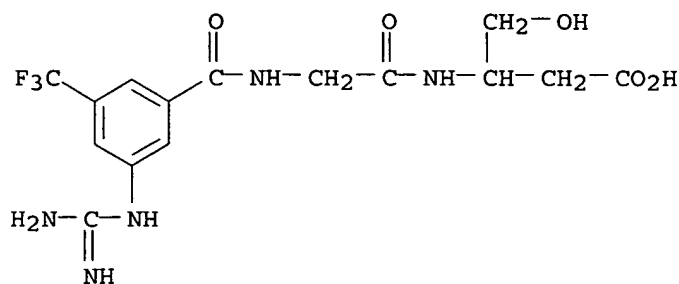
CRN 76-05-1

CMF C2 H F3 O2



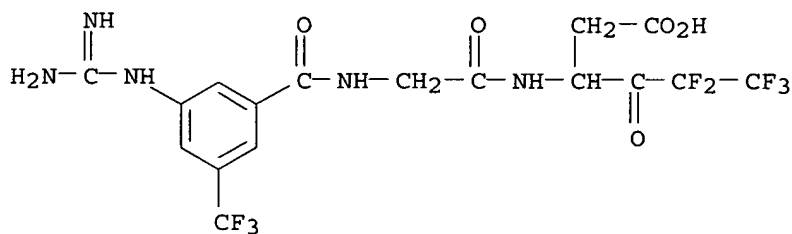
RN 188811-53-2 HCAPLUS

CN Butanoic acid, 3-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-hydroxy- (9CI) (CA INDEX NAME)



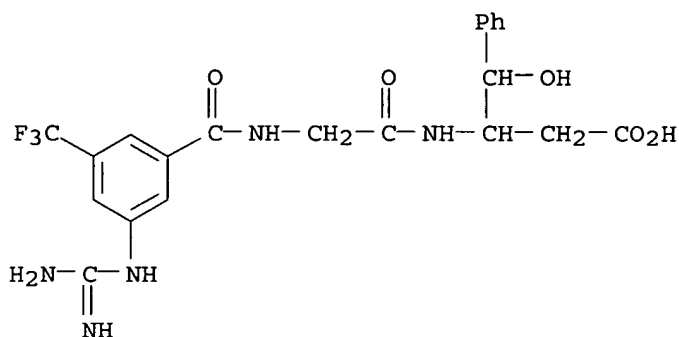
RN 188811-54-3 HCAPLUS

CN Hexanoic acid, 3-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-5,5,6,6,6-pentafluoro-4-oxo- (9CI) (CA INDEX NAME)



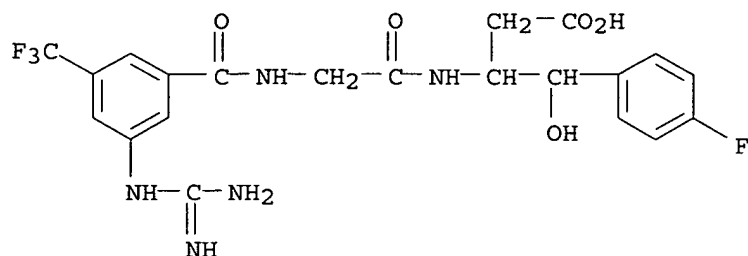
RN 188811-55-4 HCAPLUS

CN Benzenebutanoic acid, β-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-γ-hydroxy- (9CI) (CA INDEX NAME)



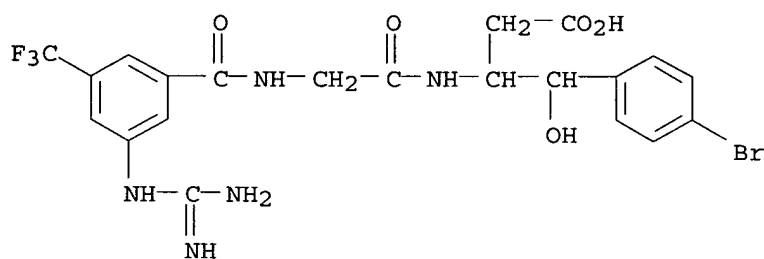
RN 188811-56-5 HCAPLUS

CN Benzenebutanoic acid, β-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-fluoro-γ-hydroxy- (9CI) (CA INDEX NAME)



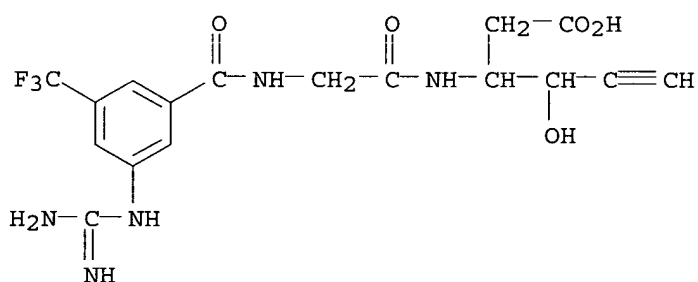
RN 188811-57-6 HCAPLUS

CN Benzenebutanoic acid, β-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-bromo-γ-hydroxy- (9CI) (CA INDEX NAME)



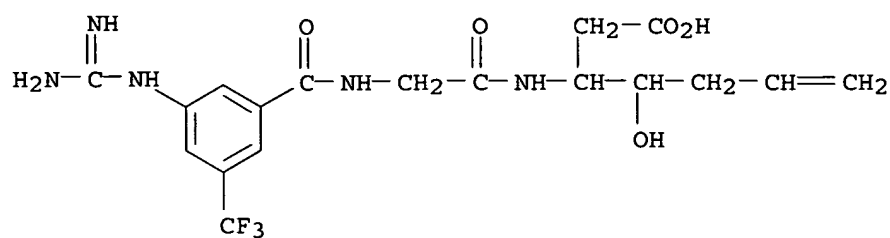
RN 188811-58-7 HCAPLUS

CN 5-Hexynoic acid, 3-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-hydroxy- (9CI) (CA INDEX NAME)



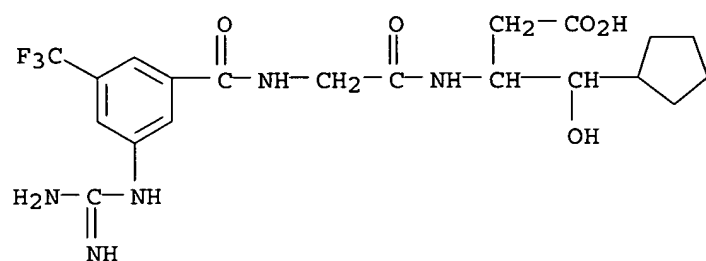
RN 188811-59-8 HCAPLUS

CN 6-Heptenoic acid, 3-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-hydroxy- (9CI) (CA INDEX NAME)



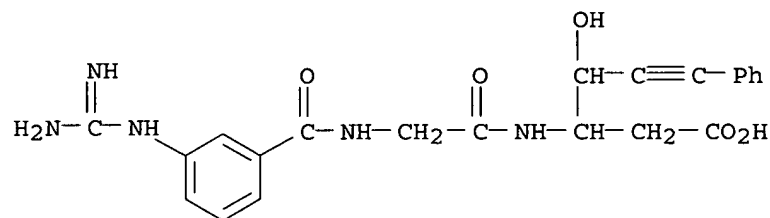
RN 188811-60-1 HCAPLUS

CN Cyclopentanebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]- $\gamma$ -hydroxy- (9CI) (CA INDEX NAME)



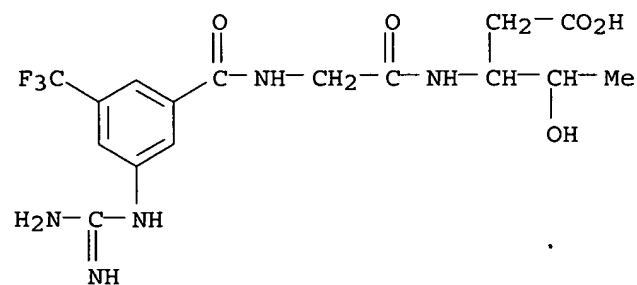
RN 188811-61-2 HCAPLUS

CN 5-Hexynoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-hydroxy-6-phenyl- (9CI) (CA INDEX NAME)



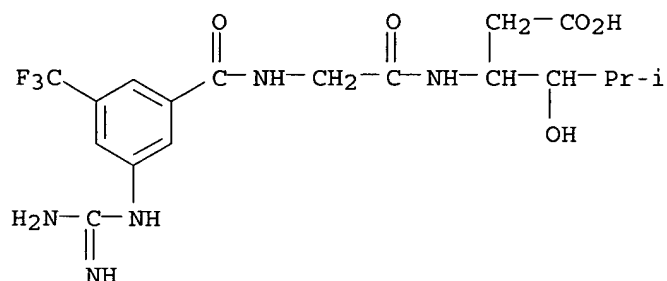
RN 188811-62-3 HCAPLUS

CN Pentonic acid, 3-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-2,3,5-trideoxy- (9CI) (CA INDEX NAME)



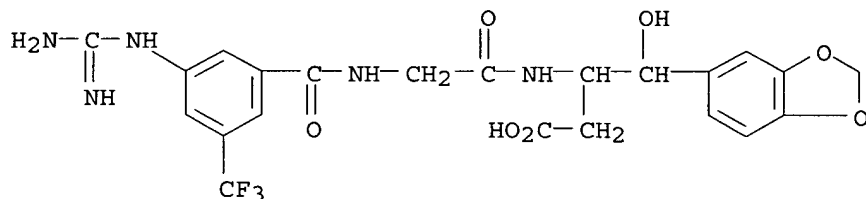
RN 188811-63-4 HCAPLUS

CN Hexanoic acid, 3-[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-hydroxy-5-methyl- (9CI)  
(CA INDEX NAME)



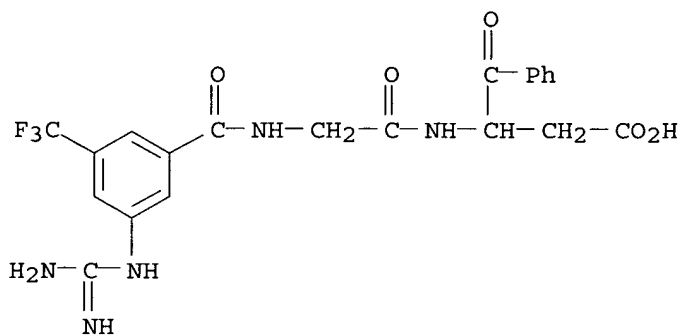
RN 188811-64-5 HCAPLUS

CN 1,3-Benzodioxole-5-butanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]- $\gamma$ -hydroxy- (9CI) (CA INDEX NAME)



RN 188811-66-7 HCAPLUS

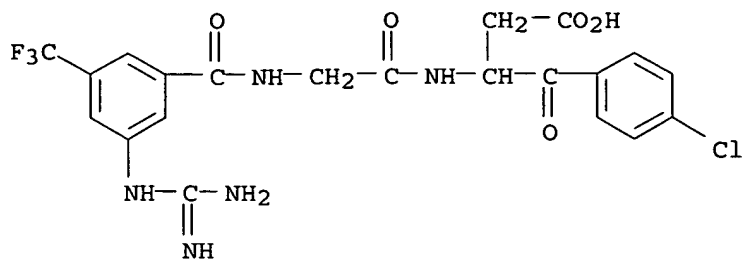
CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]- $\gamma$ -oxo- (9CI) (CA INDEX NAME)



RN 188811-67-8 HCAPLUS

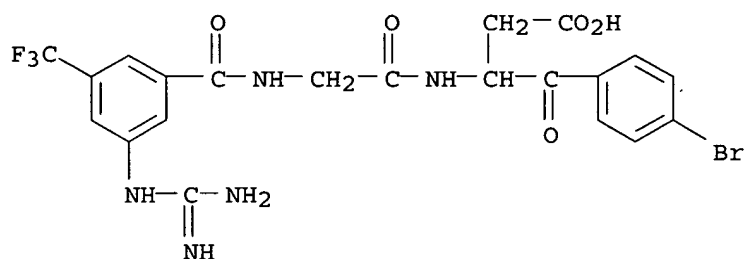
CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-chloro- $\gamma$ -oxo- (9CI)  
(CA INDEX NAME)





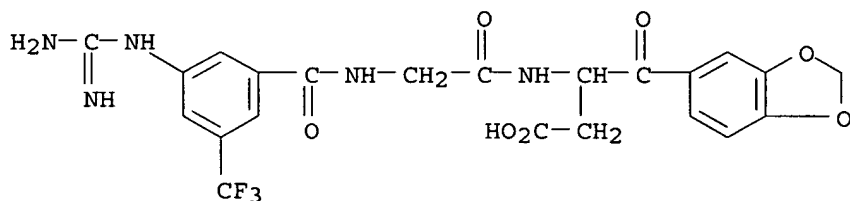
RN 188811-68-9 HCAPLUS

CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-bromo- $\gamma$ -oxo- (9CI)  
(CA INDEX NAME)



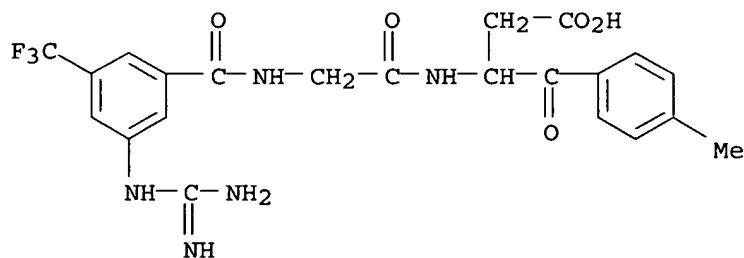
RN 188811-69-0 HCAPLUS

CN 1,3-Benzodioxole-5-butanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]- $\gamma$ -oxo- (9CI) (CA INDEX NAME)



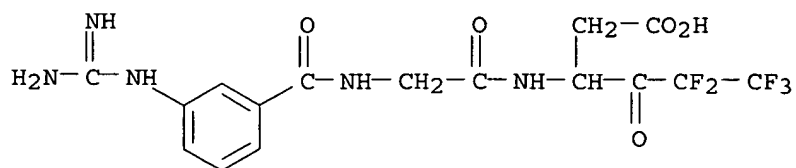
RN 188811-70-3 HCAPLUS

CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]-5-(trifluoromethyl)benzoyl]amino]acetyl]amino]-4-methyl- $\gamma$ -oxo- (9CI)  
(CA INDEX NAME)

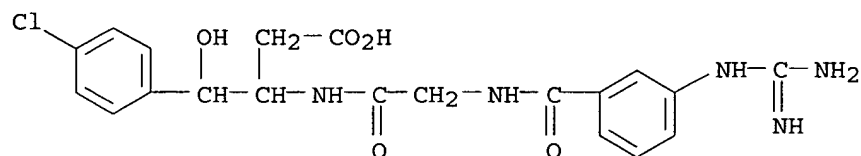


RN 188811-85-0 HCAPLUS

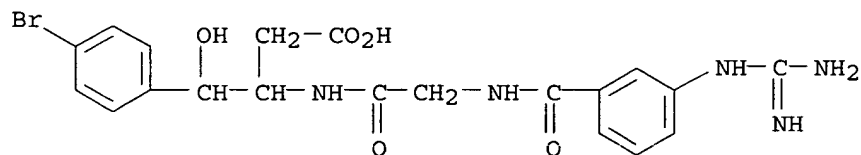
CN Hexanoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-5,5,6,6,6-pentafluoro-4-oxo- (9CI) (CA INDEX NAME)



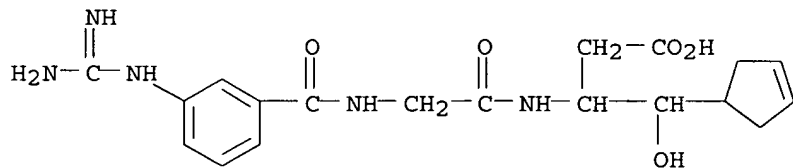
RN 188811-86-1 HCAPLUS

CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-chloro- $\gamma$ -hydroxy- (9CI) (CA INDEX NAME)

RN 188811-87-2 HCAPLUS

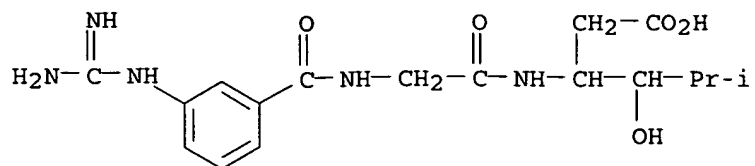
CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-bromo- $\gamma$ -hydroxy- (9CI) (CA INDEX NAME)

RN 188811-88-3 HCAPLUS

CN 3-Cyclopentene-1-butanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]- $\gamma$ -hydroxy- (9CI) (CA INDEX NAME)

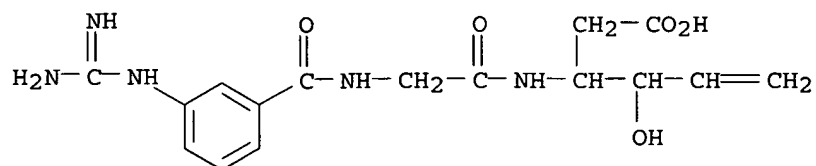
RN 188811-89-4 HCAPLUS

CN Hexanoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-hydroxy-5-methyl- (9CI) (CA INDEX NAME)



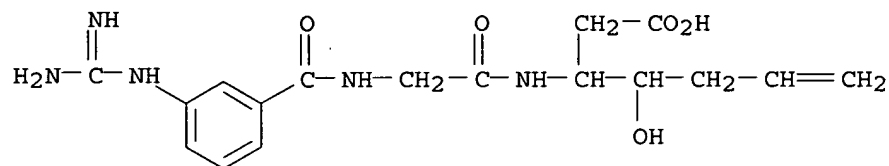
RN 188811-90-7 HCAPLUS

CN 5-Hexenoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-hydroxy- (9CI) (CA INDEX NAME)



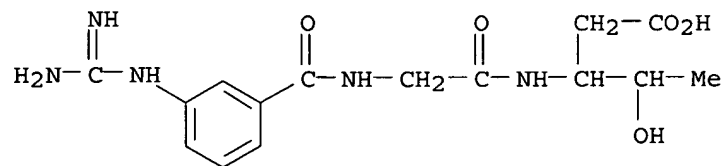
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CN 6-Heptenoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-hydroxy- (9CI) (CA INDEX NAME)



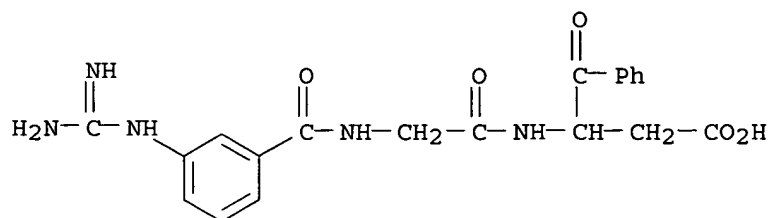
RN 188811-92-9 HCAPLUS

CN Pentonic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-2,3,5-trideoxy- (9CI) (CA INDEX NAME)

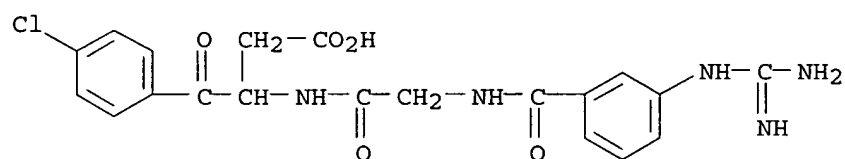


RN 188811-93-0 HCAPLUS

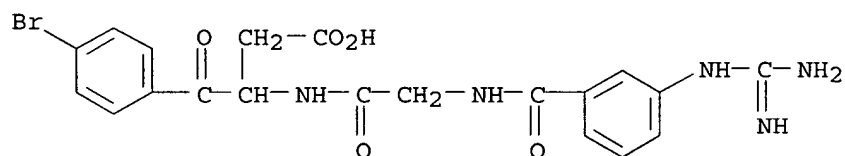
CN Benzenebutanoic acid, β-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-γ-oxo- (9CI) (CA INDEX NAME)



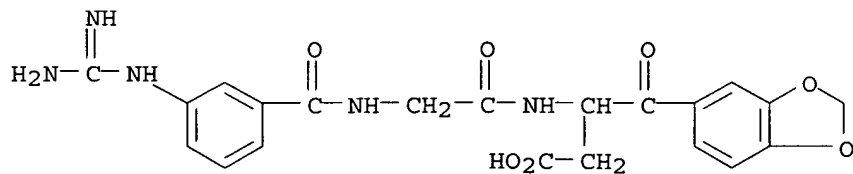
RN 188811-94-1 HCAPLUS  
 CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-chloro- $\gamma$ -oxo- (9CI) (CA INDEX NAME)



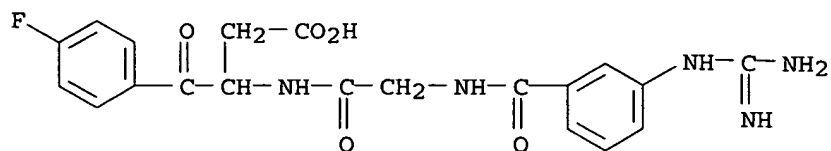
RN 188811-95-2 HCAPLUS  
 CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-bromo- $\gamma$ -oxo- (9CI) (CA INDEX NAME)



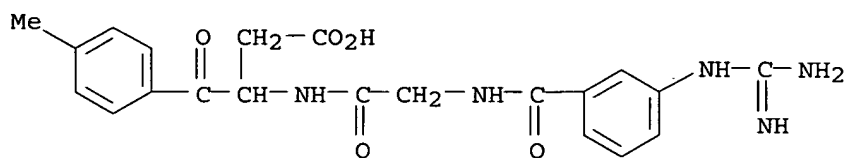
RN 188811-96-3 HCAPLUS  
 CN 1,3-Benzodioxole-5-butanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]- $\gamma$ -oxo- (9CI) (CA INDEX NAME)



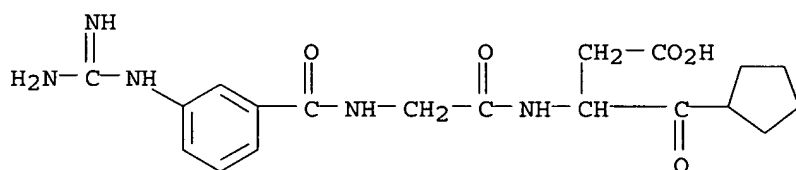
RN 188811-97-4 HCAPLUS  
 CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-fluoro- $\gamma$ -oxo- (9CI) (CA INDEX NAME)



RN 188811-98-5 HCAPLUS

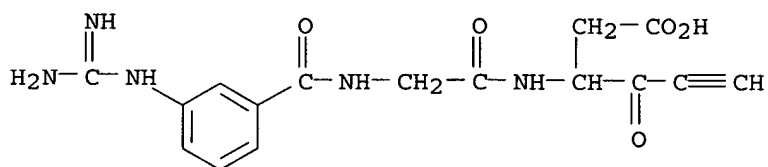
CN Benzenebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-methyl- $\gamma$ -oxo- (9CI) (CA INDEX NAME)

RN 188811-99-6 HCAPLUS

CN Cyclopentanebutanoic acid,  $\beta$ -[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]- $\gamma$ -oxo- (9CI) (CA INDEX NAME)

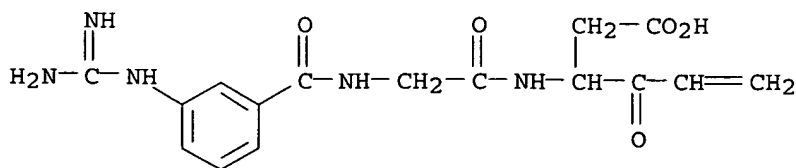
RN 188812-00-2 HCAPLUS

CN 5-Hexynoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-oxo- (9CI) (CA INDEX NAME)



RN 188812-01-3 HCAPLUS

CN 5-Hexenoic acid, 3-[[[3-[(aminoiminomethyl)amino]benzoyl]amino]acetyl]amino]-4-oxo- (9CI) (CA INDEX NAME)



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